

SEQUENCE LISTING

(1) GENERAL INFORMATION

- (i) APPLICANT: Rath, Matthias
- (ii) TITLE OF INVENTION: METHOD OF PRODUCING
VACCINES FROM PRTOEIN SIGNAL OLIGOPEPTIDES
- (iii) NUMBER OF SEQUENCES: 360
- (iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: INHOUSE IP MANAGEMENT
(B) STREET: 280 Colorado Avenue
(C) CITY: Palo Alto
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 94301
- (v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy Disk, 3.50 inch,
1.44MB Storage
(B) COMPUTER: IBM PC COMPATIBLE
(C) OPERATING SYSTEM: WINDOWS 95
(D) SOFTWARE: MS WORD 6.0
- (vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: NOT AVAILABLE
(B) FILING DATE: JANUARY 14, 1999
(C) CLASSIFICATION: 435
- (viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: ALI KAMAREI
(B) REGISTRATION NUMBER: 37000
(C) REFERENCE/DOCKET NUMBER: 10262-1US
- (ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 650-322-7371
(B) TELEFAX: 650-322-7389

(2) INFORMATION FOR SEQ ID NO: 1:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Asp Val Tyr Ala Gln Glu Lys Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

Asp	Val	His	Asn	Gln	Glu	Lys	Gln	Asn
1				5				

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS.

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Glu Ile Arg Arg Glu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

Glu Asp Glu Met Gly His Pro Glu Ile Gly Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

Glu Asp Glu Leu Gly His Pro Glu Lys Gly Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

Ala Ser Leu Leu Ala Tyr Gly Met Pro Lys Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

Glu Pro Arg Lys Gln Asp Ala Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

Glu Pro Arg Lys Gln Asp Ala Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

Asn Lys Thr Val Glu Gln Leu Gly Gln Glu Glu
1 5 10

00001076-05-1001

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Leu	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

Asp	Asp	Ile	Met	Asp	Ser	Ser	Tyr	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

Asp	Asp	Met	Met	Asp	Lys	Ser	Ile	Thr	Arg	Arg
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

Lys	Leu	Tyr	Cys	Arg	Glu	Gln	Pro	Tyr	Tyr
1				5					10

00001976-061504

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

(2) INFORMATION FOR SEQ ID NO: 15:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

(2) INFORMATION FOR SEQ ID NO: 16:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

(2) INFORMATION FOR SEQ ID NO: 17:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

Lys Val Asp Leu Ser Lys Phe Ser Leu Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

Lys Lys His Ser Phe Ile Val Thr Phe Lys Thr
1 5 10

(2) INFORMATION FOR SEQ ID NO: 20:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

Asp Gly Glu Lys Glu His Ala Asn Ala Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

Asp 1	Gly	Glu	Lys	Glu 5	His	Ala	Asn	Ala	Leu 10	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----

(2) INFORMATION FOR SEQ ID NO: 22:

06-07-2019

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

Thr Asp Glu Lys Asp Leu Lys Gln Ala Arg Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 23:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

Lys Ile Gly Thr Asp Ile Gln Asp Asn Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 24:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

Lys Val Gly Thr Asp Ile Gln Asp Asn Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 25:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 25:

Gln Arg Ala Thr Pro Glu Gln Tyr
1 5

(2) INFORMATION FOR SEQ ID NO: 26:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8

TEST 90-920000

[illegible]

Leu Arg Ala Thr Pro Gln Gln Arg
 1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu Leu Ala Ser Ala Glu Gln Arg
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys₁ Glu Asn Tyr Gly₅ Gln Lys Glu Ala Glu₁₀ Lys

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Glu Glu Asn Tyr Gly Gln Lys Asp Pro Glu Lys
1 : 5 10

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 30:

Asp Glu Asn Tyr Gly Lys Lys Asp Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 31:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:

Arg Val Lys Ala Leu Tyr Glu Glu Leu
1 5

(2) INFORMATION FOR SEQ ID NO: 32:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 32:

Lys Cys Lys Lys Ile Phe Asn Asp Leu
1 5

(2) INFORMATION FOR SEQ ID NO: 33:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 33:

Lys Glu Ala Glu Lys Val Ala Arg Val Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 34:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

00001975-051504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34:

Lys Asp Ser Val Ala Glu Ala Lys Cys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 35:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:

Lys Asp Pro Glu Lys Val Ala Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 36:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 36:

Gln Tyr Glu Glu Asp Ser Tyr Ser His
1 5

(2) INFORMATION FOR SEQ ID NO: 37:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 37:

Lys Tyr Glu Glu Asp Ser Tyr Asn Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 38:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 38:

100-24660

Glu Tyr Glu Glu Ser Ile Ala Lys Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 39:

5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Glu Val Leu Glu Glu Glu Asp Arg Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Lys Gly Val Ser Ser Ser Thr Arg Lys
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Ser Val Leu Glu Glu Glu Glu Asp Asn Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asp 1	Glu	Asn	Val	Ser 5	Lys	Arg	Ile	Glu	Pro 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(2) INFORMATION FOR SEQ ID NO: 51:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 51:

Asp Asp Met Met Pro Lys Arg Val Glu
1 5

(2) INFORMATION FOR SEO ID NO: 52:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 52:

Asp Pro Thr Met Pro Leu Trp Glu Phe
1 5

(2) INFORMATION FOR SEQ ID NO: 53:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 53:

Lys Lys Val Pro Asp Asn Cys Cys Arg Arg Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 54:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 54:

Lys₁ Lys Ala Pro Asp₅ Asn Cys Cys Arg Arg₁₀ Glu

(2) INFORMATION FOR SEQ ID NO: 55:

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

Glu Thr Leu Ile Ser Asp Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 60:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 60:

Glu Glu Thr Gly Ile Asn Arg Glu Arg Lys Val Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 61:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 61:

Glu Glu Pro Gly Val Ser Gln Asp Arg Lys Val Glu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 62:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 62:

Glu Ala Ser Ser Lys Glu Glu Thr Glu Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO: 63:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single

000000-000000-000000

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 63:

Thr	Asp	Pro	Val	Thr	Ala	Ser	Pro	Arg	Asn
1				5					10

(2) INFORMATION FOR SEQ ID NO: 64:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 64:

Glu	Pro	Glu	Ile	Glu	Leu	Pro	Arg	Glu	Pro	Arg	Pro
1				5					10		
Asn	Glu	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 65:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 65:

Glu	Leu	Glu	Ile	Glu	Leu	Pro	Ser	Glu	Pro	Arg	Pro
1				5					10		
Asn	Glu	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 66:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 66:

Asn	Thr	Met	Phe	Asp	Leu	Pro	Glu	Glu	Pro	Arg	Pro
1				5					10		
Leu	Asp	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 67:

09221975-1064504

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(2) INFORMATION FOR SEQ ID NO: 68:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 68:

(2) INFORMATION FOR SEQ ID NO: 69:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 69:

(2) INFORMATION FOR SEQ ID NO: 70:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 70:

(2) INFORMATION FOR SEQ ID NO: 71:

SECRET

His	Glu	Arg	Gly	Val	Ser	Ile	Arg	Arg	Gln	Leu	Leu
1				5					10		
Ser	Lys	Lys									
		15									

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Pro	Arg	Glu	Gly	Val	Ala	Ile	Arg	Arg	Gln	Met	Leu
1				5					10		
Ser	Asp	Lys									
		15									

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

[illegible]

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Pro 1	Phe	Arg	Ala	Val 5	Glu	Leu	Arg	Arg	Leu 10	Asp	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

THE UNIVERSITY OF CHICAGO

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Leu 1	Gln	Tyr	Leu	Pro 5	Tyr	Arg	Asp	Tyr	Asn 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Ile Glu Arg Ile Pro Tyr Lys Asp Tyr Asp
1 5 10

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Leu	Gln	Ser	Leu	Pro	Tyr	Lys	Asn	Tyr	Asn
1				5					10

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Leu 1	Glu	Lys	Leu 5	Pro 5	Tyr	Ala	Ser	Tyr	Asp 10
----------	-----	-----	----------	----------	-----	-----	-----	-----	-----------

(2) INFORMATION FOR SEQ ID NO: 79:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:

Cys	Leu	Asp	Glu	Lys	Glu	Phe	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 80:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 80:

Cys	Leu	Asp	Gly	Lys	Glu	Tyr	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 81:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 81:

Leu	Leu	Asn	Asn	Lys	Glu	Tyr	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 82:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

Leu	Leu	Asp	Gly	Gln	Glu	Phe	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 83:

- (i) SEQUENCE CHARACTERISTICS

00001976-061501

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 83:

(2) INFORMATION FOR SEQ ID NO: 84:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 84:

(2) INFORMATION FOR SEQ ID NO: 85:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 85:

(2) INFORMATION FOR SEQ ID NO: 86:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 86:

(2) INFORMATION FOR SEQ ID NO: 87:

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 87:

Glu	Lys	Ala	Leu	Ser	Lys	Leu	His	Glu	Tyr
1				5					10

(2) INFORMATION FOR SEQ ID NO: 88:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 88:

Glu	Lys	Ala	Leu	Val	Lys	Leu	Gln	Glu	Phe
1				5					10

(2) INFORMATION FOR SEQ ID NO: 89:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 89:

Glu	Gln	Ala	Leu	Ala	Arg	Leu	Gln	Glu	Glu
1				5					10

(2) INFORMATION FOR SEQ ID NO: 90:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 90:

Glu	Gln	Ala	Leu	His	Ala	Leu	Gln	Thr	Met
1				5					10

(2) INFORMATION FOR SEQ ID NO: 91:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

00901076 064504
F05F50 926F8650

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 91:

Cys Lys Asp Asn Pro Gly Glu Asn Ala Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 92:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 92:

Ser 1	Thr	Glu	Thr	Pro 5	Gly	Lys	Asn	Ala	Cys 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(2) INFORMATION FOR SEQ ID NO: 93:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 93:

Asn Ile His Gly Ser Gly Leu Asn Ala Ser
1 5 10

(2) INFORMATION FOR SEQ ID NO: 94:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 94:

His 1 Asn Arg Ser Lys 5 Ile Asn Leu Gln Asp 10

(2) INFORMATION FOR SEQ ID NO: 95:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 95:

Asp Val Ala Ser Leu Thr Asp Tyr Leu Lys Ser Lys
1 5 10
Arg

(2) INFORMATION FOR SEQ ID NO: 100:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 100:

Asp Tyr Ser Lys Tyr Met Asp Asn Arg Arg Ala Lys
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 101:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 101:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Ala Lys
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 102:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 102:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln
1 5 10
Gln

(2) INFORMATION FOR SEQ ID NO: 103:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8

103150-9267850

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 107:

Asp Tyr Ser Lys Tyr Met Asp Asn Arg Arg Ala Lys
 1 5 10
 Asp

(2) INFORMATION FOR SEQ ID NO: 108:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 108:

Asp Tyr Ser Lys Tyr Leu Asp Asn Arg Arg Ala Lys
 1 5 10
 Asp

(2) INFORMATION FOR SEQ ID NO: 109:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 109:

Asp Tyr Ser Lys Tyr Leu Asp Ser Arg Arg Ala Gln
 1 5 10
 Gln

(2) INFORMATION FOR SEQ ID NO: 110:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 110:

Asp Tyr Ser Lys Phe Leu Asp Thr Arg Arg Ala Gln

00000-00000-00000

THE

Asp 1 Glu	Met	Ser	Ser	Tyr 5	Leu	Glu	Glu	Lys	Ala 10	Ala	Lys
-----------------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

[illegible]

```
(i)  SEQUENCE CHARACTERISTICS
      (A) LENGTH:      9
      (B) TYPE:        amino acid
      (C) STRANDEDNESS: single
      (D) TOPOLOGY:    linear
```

Asp Pro Leu Ser Asp Pro Asp Gln Met
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Asn Glu Asp Lys Arg His Ser Gln
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 15
(B) TYPE: amino acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 118:

Lys	Asp	Glu	Pro	Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg
1				5					10		
His	Ser	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 119:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 119:

Arg	Glu	Leu	Ser	Asn	Met	Lys	Arg	His
1				5				

(2) INFORMATION FOR SEQ ID NO: 120:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 120:

Glu	Ala	Arg	Glu	Leu	Ser	Thr	Pro	Lys	Xaa	His	Ser
1				5					10		
Glu											

(2) INFORMATION FOR SEQ ID NO: 121:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 121:

Glu	Asp	Pro	Asp	Gln	Ile	Asn	Glu	Asp	Lys	Arg	His
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 122:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 122:

Asp	Asp	Pro	Asp	Gln	Met	Asn	Glu	Asp	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 123:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 123:

Gly	Asp	Pro	Asp	Gln	Ile	Asn	Glu	Asp	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 124:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 124:

Asp	Glu	Ser	Arg	Gln	Leu	Asn	Glu	Val	Lys	Arg	His
1				5					10		
Ser	Gln										

(2) INFORMATION FOR SEQ ID NO: 125:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 125:

Met	Asn	Thr	Lys	Arg	Asn	Arg	Asn	Asn
1				5				

(2) INFORMATION FOR SEQ ID NO: 126:

00001976-051501

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 126:

(2) INFORMATION FOR SEQ ID NO: 127:

(xi) SEQUENCE DESCRIPTION: SEO ID NO: 127:

(2) INFORMATION FOR SEO ID NO: 128:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 128:

(2) INFORMATION FOR SEO ID NO: 129:

(xi) SEQUENCE DESCRIPTION: SEO ID NO: 129:

(2) INFORMATION FOR SEQ ID NO: 130:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 130:

Lys Asn Thr Lys Arg Asn Arg Asn Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 131:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 12
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 131:

Thr Lys Arg Asn Gly Xaa Xaa Gly Gln Glu Asp Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 132:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 132:

Gln Glu Asp Lys Glu Asn Asp Lys Phe
1 5

(2) INFORMATION FOR SEQ ID NO: 133:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 133:

Lys Arg His Ser Glu Phe Glu Arg His Ala Glu
1 5
10

(2) INFORMATION FOR SEQ ID NO: 134:

00001076-DE1301

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 138:

Lys	Gly	Arg	Gly	Arg	Arg	Asp	Phe	Pro	Glu	Glu
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 139:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 139:

Asp	Arg	Leu	Lys	Ala	Gln	Val	Arg	Arg	Glu
1				5					10

(2) INFORMATION FOR SEQ ID NO: 140:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 140:

Ala	Lys	Leu	Lys	Ser	Gly	Lys	Val
1				5			

(2) INFORMATION FOR SEQ ID NO: 141:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 141:

Lys	Ser	Gly	Gln	Pro	Lys	Pro	Glu
1				5			

(2) INFORMATION FOR SEQ ID NO: 142:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid

000105-06150

Doc. 109-25

Lys Gln Gly Gln Asp Arg Arg Glu
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Ala Asp Pro Ser Lys Lys Gln
1 5

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

Arg Thr Asp Leu Ser Lys Lys Gln
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Ala Asp Leu Ser Lys Lys Gln
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
```


(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 150:

Trp Ala Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 151:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 151:

Pro Met Glu Glu Glu Glu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 152:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 152:

Asp Phe Gly Arg Arg Ser Ala Glu Asp Glu Asn
1 5 10

(2) INFORMATION FOR SEQ ID NO: 153:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 153:

Met Asp Phe Gly Arg Arg Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 154:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 154:

090107-0511

Arg Arg Ser Ala Glu Asp Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 155:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 11
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 155:

Arg Arg Ser Ala Glu Asp Gly Asp Gln His Pro
1 5 10

(2) INFORMATION FOR SEQ ID NO: 156:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 156:

Arg Asp Leu Glu Leu Pro Trp Leu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 157:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 157:

Arg Gly Lys Glu Pro His Glu Leu Asp Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 158:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 158:

Arg Gly Gln Glu Pro Leu Arg
1 5

0001976-051501

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 163:

Lys Pro Arg Ser Gln Leu Gln Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 164:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 164:

Gln His Trp Ser Tyr Gly Leu Arg Pro Gly Gly Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 165:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 165:

Gly Leu Gln Pro Gly Gly Lys Arg Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 166:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 166:

His Gly Trp Leu Pro Gly Gly Lys Arg Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 167:

- (i) SEQUENCE CHARACTERISTICS

00881076.061501
F05F50'926T880

- (A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 167:

Gly Trp Leu Pro Gly Gly Lys Arg Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 168:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 168:

His Gly Trp Tyr Pro Gly Gly Lys Arg Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 169:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 169:

Gln His Tyr Ser Leu Glu Trp Lys Pro Gly
1 5 10

(2) INFORMATION FOR SEQ ID NO: 170:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 170:

Arg Pro Gly Gly Lys Arg Asp Ala Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 171:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
(B) TYPE: amino acid

EST-90-926T8850

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 175:

Trp Asn Lys Asp Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 176:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 176:

Glu Val Glu Arg Ala Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 177:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 177:

His Arg Arg Leu Phe His Lys Ser Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 178:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 178:

Lys Thr Pro Phe Pro Asp Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 179:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

0001076-061800

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 179:

Tyr Glu Lys Glu Val Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 180:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 180:

Glu Val Asp Leu Arg Lys Pro
1 5

(2) INFORMATION FOR SEQ ID NO: 181:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 181:

Lys Val Lys Ile Glu Val Asn Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 182:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 182:

Ala Arg Met Ala Pro Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 183:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 183:

00001075-054001

1

5

(2) INFORMATION FOR SEQ ID NO: 188:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 188:

Lys Met Pro Phe Pro Glu Ser
1 5

(2) INFORMATION FOR SEQ ID NO: 189:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 189:

Lys Thr Pro Phe Leu Glu Ala
1 5

(2) INFORMATION FOR SEQ ID NO: 190:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 190:

His His Arg Leu Phe His Lys Ser Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 191:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 191:

His Gln Arg Leu Phe His Lys Ser Asp
1 5

00001076-054504

D **E** **F** **G** **H** **I** **J** **K** **L** **M** **N** **O** **P** **Q** **R** **S** **T** **U** **V** **W** **X** **Y** **Z**

Arg 1 Lys	Glu	Lys	Leu	Asn 5	Ile	Gly	Tyr	Ile	Glu 10	Asp	Leu
-----------------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

[illegible]

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Lys Asp Lys Met Ala Glu Asp Glu Val Glu
1 5 10

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Lys Asp Thr Leu Asp Glu Asp Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 200:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 200:

Lys Leu Glu Glu His Tyr Glu Leu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 201:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 201:

Lys Leu Ala Gln Ser Tyr Glu Leu Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 202:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 202:

Glu Arg Asn Asp Leu Phe Leu Ser Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 203:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 203:

Asp Val Asn Glu Glu Gly Thr Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 204:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8

0001075-061501

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 204:

Asp Val Thr Glu Glu Gly Thr Val
1 5

(2) INFORMATION FOR SEQ ID NO: 205:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 205:

Arg Gly Ser Thr Glu Asp Glu Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 206:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 206:

Gly Gly Asn Thr Glu Gln Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 207:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 207:

Glu Lys Ser Ala Ser Phe Arg Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 208:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single

00001975-00100

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 208:

Glu Lys Ser Ala Arg Phe Lys Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 209:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 209:

Glu Glu Ala Arg Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 210:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 210:

Glu Glu Ala Arg Glu Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 211:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 211:

Lys Thr Gln Thr Lys Gly Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 212:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

0909195-0610
T05T90-92T880

Glu Glu Glu Glu Val Ala Glu Val Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 217:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 217:

Glu Glu Glu Glu Ala Asp Asp Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 218:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 218:

Ala Asp Asp Asp Glu Asp Glu Glu Asp Gly
1 5 10

(2) INFORMATION FOR SEQ ID NO: 219:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 219:

Asp Glu Asp Gly Asp Glu Val Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 220:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 220:

Glu Glu Ala Glu Glu Pro Tyr Glu Glu
1 5

0001075-054501

(2) INFORMATION FOR SEQ ID NO: 221:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 221:

Ala	Asp	Val	Glu	Glu	Glu	Glu	Ala	Asp	Asp	Asp	Glu
1				5					10		
Asp	Val	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 222:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 222:

Lys	Ala	Lys	Glu	Arg	Leu	Glu
1				5		

(2) INFORMATION FOR SEQ ID NO: 223:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 223:

Glu	Ala	Lys	His	Arg	Glu	Arg
1				5		

(2) INFORMATION FOR SEQ ID NO: 224:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 224:

Arg	Glu	Trp	Glu	Glu	Ala	Glu	Arg
1				5			

0001975-064501

[illegible]

Glu	Asp	Val	Cys	Gly	Arg
1				5	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 230:

Glu 1	Asp	Val	Arg	Gly 5	Arg
----------	-----	-----	-----	----------	-----

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 231:

Glu	Asp	Leu	Arg	Asn	Arg
1				5	

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 232:

His Leu Arg Lys Leu Arg Lys Arg
1 5

(i) SEQUENCE CHARACTERISTICS

SECRET

His	Pro	Arg	Lys	Met	Lys	Arg	Arg
1				5			

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

His 1	Leu	Arg	Lys	Met 5	Arg	Lys	Arg
----------	-----	-----	-----	----------	-----	-----	-----

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Asp Arg Leu Asp Glu Val Lys Glu
1 5

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg	Ala	Arg	Met	Glu	Glu
1				5	

(A) LENGTH: 6
(B) TYPE: amino acid

(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 237:

Arg Gly Arg Met Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 238:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 238:

Arg Gly Arg Leu Glu Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 239:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 239:

Asp Tyr Thr Glu Val Gln Arg Arg Asn Gln Leu His
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 240:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 240:

Lys Glu Leu Lys Asn Pro Thr Asn Pro Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 241:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12

0001096-06400
FOI 90-9267860

1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815

Glu Gly Glu Glu Gly Gly Asp Phe Asp Glu Ala Lys
1 5 10

(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

```

Asp   Glu   Ala   Lys   Leu   Ala   Glu   Ala   Arg   Glu   Met   Ile
 1      :      :      :      5      :      :      :      :      10
Arg      :      :      :      :      :      :      :      :      :

```

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Asp Met Val Met Arg Lys Arg Arg Asn
1 5

(A) LENGTH: 21
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg 1	Lys	Arg	Arg	Asn 5	Thr	Asn	Tyr	Thr	Gln 10	Val	Pro
Asn	Lys	Asp 15	Ala	Asp	Glu	Asp	Asp 20	Leu			

(2) INFORMATION FOR SEQ ID NO: 245:

THESE

Lys Ala Arg Lys Arg Lys Thr Lys Lys
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8'
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Lys Pro Pro Lys Arg Pro Glu
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Asp Ala Arg Glu Ala Ile Asp Arg
1 5

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Arg Glu Tyr Met Arg Glu Gln Asp Arg Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 7

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 249:

Arg Lys Arg Asn Lys Ala Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 250:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 250:

Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu
1 5 10

(2) INFORMATION FOR SEQ ID NO: 251:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 23
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 251:

Arg Lys Arg Asn Lys Ala Arg Tyr Ser Pro Leu His
1 5 10
Asn Glu Asp Glu Ala Gly Asp Glu Asp Glu Leu
15 20

(2) INFORMATION FOR SEQ ID NO: 252:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 252:

Lys Glu Glu Ala Glu Lys Lys Ala Ala Glu Gln Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 253:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8

00001075-061501

(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 253:

His Ala Asp Arg Arg Leu Met Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 254:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 254:

Asp Val Glu Arg Gln Ser Thr Asp Ala Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 255:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 255:

Lys Ile Glu Gly Asp Leu Lys Lys
1 5

(2) INFORMATION FOR SEQ ID NO: 256:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 256:

Glu Leu Arg Pro Gln Leu Glu Glu Ala Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 257:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single

0001076-061504

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 257:

Asp	Ser	Gln	Tyr	Gln	Glu	Ala	Arg	Glu	Ala	Glu	Glu
1				5					10		

(2) INFORMATION FOR SEQ ID NO: 258:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 258:

Arg	Leu	Lys	Lys	Thr	Glu	Ala	Glu	Lys
1				5				

(2) INFORMATION FOR SEQ ID NO: 259:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 259:

Ala	Lys	Thr	Lys	Gln	Lys	Ala
1				5		

(2) INFORMATION FOR SEQ ID NO: 260:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 260:

Asp	Leu	Ala	Arg	Ser	Ala	Asp	Lys	Ser
1				5				

(2) INFORMATION FOR SEQ ID NO: 261:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

00001976-064504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 269:

Leu	Lys	Asn	Asp	Gly	Arg	Gln	Val	Glu	Lys	Arg	Arg
1				5					10		
Asn				:							

(2) INFORMATION FOR SEQ ID NO: 270:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 270:

Lys 1	Asn	Asp	Gly	Arg 5	Gln	Val	Glu	Lys	Arg 10	Arg
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----

(2) INFORMATION FOR SEQ ID NO: 271:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 11

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 271:

Lys₁ Asp Asp Trp Arg₅ Lys Ile Pro Lys Gln₁₀ Arg

(2) INFORMATION FOR SEQ ID NO: 272:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 7

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 272:

Lys 1	Lys	Val	Glu	Arg 5	Gln	Arg
----------	-----	-----	-----	----------	-----	-----

(2) INFORMATION FOR SEQ ID NO: 273:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 273:

Asp Gly Val Pro Val Glu Lys Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 274:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 274:

Arg Gly Asp His Arg Asp Asn
1 5

(2) INFORMATION FOR SEQ ID NO: 275:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 6
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 275:

Asp Glu His Glu Arg Trp
1 5

(2) INFORMATION FOR SEQ ID NO: 276:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 276:

Asp Glu Asp Asp Arg Trp Thr Lys Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 277:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 277:

Glu Phe Ala Asp Arg Asp Glu Val Arg

000092526350

1

5

(2) INFORMATION FOR SEQ ID NO: 278:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 278:

Glu Val Ala His Arg Asp Glu
1 5

(2) INFORMATION FOR SEQ ID NO: 279:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 279:

Glu Val Ala Asp Arg Asp Glu Val Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 280:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 7
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 280:

Arg Tyr Asp Glu Tyr Lys Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 281:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 5
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 281:

Arg Ser Gly Glu Pro
1 5

00001075-064504

U.S. DEPARTMENT OF JUSTICE

(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Asn Gly Asp Gln Gln Gly Ile His His
1 5 10

(A) LENGTH: 6
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Ala Arg Gln Arg Arg Pro
1 5

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg . Asp Asp Asn Asp Arg Asp Pro Ser Ala Lys
1 5 10

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Val Ser Lys Arg Pro Asp Tyr Asp
1 5

(2) INFORMATION FOR SEQ ID NO: 286:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 286:

Glu Ala Phe Glu Cys Phe Glu Ser Asp Pro Asn Ala
1 5 10
Lys

(2) INFORMATION FOR SEQ ID NO: 287:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 287:

Lys Cys Arg Lys Lys Tyr Glu Phe Cys Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 288:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 13
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 288:

His Arg His Gln Arg Thr Pro Glu Asn Tyr Pro Asn
1 5 10
Asp

(2) INFORMATION FOR SEQ ID NO: 289:

- (i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 289:

Asp Pro Ser Ile Arg Trp Glu Tyr Cys

09881975 051501

1

5

(2) INFORMATION FOR SEQ ID NO: 290:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 290:

His	Gln	His	Lys	Arg	Thr	Pro	Glu	Asn	His	Pro	Asn
1				5					10		
Asp	Asp										

(2) INFORMATION FOR SEQ ID NO: 291:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 291:

Met	Asp	Pro	Ser	Val	Arg	Arg	Glu	Tyr	Cys
1				5					10

(2) INFORMATION FOR SEQ ID NO: 292:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 9
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 292:

Arg	Thr	Pro	Glu	Asn	Tyr	Pro	Asn	Gly
1				5				

(2) INFORMATION FOR SEQ ID NO: 293:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 8
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 293:

Leu	Glu	Ala	Pro	Ser	Lys	Gln	Ala
1				5			

00881976-064504

[illegible]

```

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

```

Leu 1	Glu	Ala	Phe	Leu 5	Gln	Glu	Pro	Thr	Glu 10	Glu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----

(A) LENGTH: 9
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Gly His Leu Ala Gly Gly Thr Asp Arg
1 5

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Glu Arg Arg Lys Asp Arg Gly Gly Arg Glu Asp
1 5 10

(A) LENGTH: 11
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Glu Ser Arg Lys Asn Arg Gly Gly Arg Glu Glu
1 5 10

[illegible]

THE UNIVERSITY OF CHICAGO

```
(xi) SEQUENCE DESCRIPTION:  SEQ  ID  NO: 301:
His  Glu  Arg  Glu  Glu  Glu  Leu  Arg  Lys  Arg  Leu  Arg
1      5      10
```

(2) INFORMATION FOR SEQ ID NO: 302:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 10
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 302:

Thr Glu Glu Glu Leu Arg Arg Arg Leu Arg
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 303:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 10
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 303:

Asn Glu Glu Glu Leu Arg Arg Arg Leu Arg
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 304:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 304:

Glu Arg Ala Asp Glu Glu Gly Leu Gln Gly Lys Leu
 1 5 10
 Arg

(2) INFORMATION FOR SEQ ID NO: 305:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 11
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 305:

Asp Ser Asp Glu Glu Leu Leu Arg Thr Val Arg
 1 5 10

(2) INFORMATION FOR SEQ ID NO: 306:

00001075-061501

[illegible][illegible]

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 8
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Pro Glu Glu Arg Arg Leu Leu Asx
1 5

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Trp Arg Asp Met Glu Pro Pro Leu Arg Glu
1 5 10

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Trp Arg Asp Met Glu Pro Pro Leu Arg Glu
1 5 10

(i) SEQUENCE CHARACTERISTICS

(2) INFORMATION FOR SEQ ID NO: 314:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 314:

Asp	Arg	Val	Tyr	Ile	His	Pro	Phe	His	Leu	Leu	Tyr
1				5					10		
Tyr	Ser	Lys									
		15									

(2) INFORMATION FOR SEQ ID NO: 315:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 315:

Asp	Arg	Val	Tyr	Ile	His	Pro	Phe	His	Leu	Val	Ile
1				5					10		
His	Asn	Glu									
		15									

(2) INFORMATION FOR SEQ ID NO: 316:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 316:

Glu	Asn	Pro	Ser	Val	Glu	Thr	Leu	Pro	Glu	Ser	Thr
1				5					10		
Phe											

(2) INFORMATION FOR SEQ ID NO: 317:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 13
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 317:

000197-06100

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 329:

Arg Glu Ile Leu Glu Glu Arg Gly
1 5

(2) INFORMATION FOR SEQ ID NO: 330:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 330:

Arg Leu Gly Pro Glu Trp Ser Gln Pro Met Lys Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 331:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 331:

Arg Ile Ser Ala Glu Trp Gly Glu Phe Ile Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 332:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 332:

Arg Ile Ser Ala Glu Trp Gly Glu Phe Ile Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO: 333:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 333:

00004096-064504

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 337:

Lys	Glu	Asp	Val	Phe	Ser	Phe	Ser	Phe	Tyr	Tyr	Asn
1				5					10		
Arg	Asp	Ser	Glu	Asn							
		15									

(2) INFORMATION FOR SEQ ID NO: 338:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 14
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 338:

Lys	Glu	Glu	Val	Phe	Ser	Val	Tyr	Tyr	Asn	Arg	Gly
1				5					10		
Ser	His										

(2) INFORMATION FOR SEQ ID NO: 339:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 10
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 339:

Asp	Pro	Gln	His	Tyr	Glu	Gly	Asn	Phe	His
1				5					10

(2) INFORMATION FOR SEQ ID NO: 340:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 340:

Glu	Lys	Leu	Met	Glu	Ala	Leu	Gly	Ala	Lys	Lys	Arg
1				5					10		
Leu	Phe	Asp									
		15									

(2) INFORMATION FOR SEQ ID NO: 341:

(i) SEQUENCE CHARACTERISTICS

- (A) LENGTH: 15

0001076-054504

Gln	Leu	Ile	Met	Gln	Ala	Leu	Gly	Val	Lys	Glu	Lys
1				5					10		
Arg	Ala	Asn									
		15									

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 15
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Lys 1	Leu	Ile	Met	Gln 5	Ala	Leu	Gly	Ala	Lys 10	Glu	Lys
Arg	Ile	Glu 15									

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Asp 1	Tyr	Val	Phe	Gln 5	Glu	Ser	Tyr	Ser	Ser 10	Lys	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Asp Tyr Val Gln Lys Asn Pro Phe Arg Asn Asp Asp
1 5 10

(2) INFORMATION FOR SEQ ID NO: 345:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 11
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 345:

Asp	Tyr	Val	Gln	Tyr	Pro	Asn	Arg	Arg	Asp	Lys
1				5					10	

(2) INFORMATION FOR SEQ ID NO: 346:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 346:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	Arg	Asn	Asn
1				5					10		
Arg											

(2) INFORMATION FOR SEQ ID NO: 347:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 347:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	His	Asn	Asn
1				5					10		
Arg											

(2) INFORMATION FOR SEQ ID NO: 348:

- (i) SEQUENCE CHARACTERISTICS
 (A) LENGTH: 13
 (B) TYPE: amino acid
 (C) STRANDEDNESS: single
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 348:

Arg	Lys	Phe	Tyr	Thr	Glu	Phe	Asp	Arg	His	Asn	Asn
1				5					10		
Arg											

00001975-06100

[illegible]

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg 1	Tyr	Leu	Glu	Leu 5	Arg	Glu	Ala	Ala	Asp 10	Tyr	Asp
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Arg Tyr Leu Glu Val Gln Glu Ala Ala Val Tyr Asp
1 5 10

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Arg Asp Val Ala Gly Glu Gln Pro Tyr Arg Arg
1 5 10

(A) LENGTH: 12
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

Lys Arg Asn Leu Ala Glu Glu Gln Pro Tyr Arg Arg
1 5 10

(2) INFORMATION FOR SEQ ID NO: 353:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 353:

Asp His Pro Leu Pro Ser Ala Glu Arg
1 5

(2) INFORMATION FOR SEQ ID NO: 354:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 9

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 354:

Asp 1	His	Pro	Leu	Pro 5	Thr	Arg	Glu	Arg
----------	-----	-----	-----	----------	-----	-----	-----	-----

(2) INFORMATION FOR SEQ ID NO: 355:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8'

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 355:

Arg	Arg	Ser	Ile	Arg	Ser	Ser	Gln
1				5			

(2) INFORMATION FOR SEQ ID NO: 356:

(i) SEQUENCE CHARACTERISTICS

(A) LENGTH: 8

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 356:

Arg Arg Ser Val Thr Ser Ser Gln
1 5

(2) INFORMATION FOR SEQ ID NO: 357:

THE UNIVERSITY OF CHICAGO

Asp 1	Pro	Ser	Lys	Met 5	Thr	Pro	Leu	Ala	Asp 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 358:

Asp 1	Thr	Ser	Lys	Met 5	Met	Leu	Leu	Val	Asp 10
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 359:

Glu 1 Pro Tyr Glu 5 Leu Glu Asn Pro Asn Gly 10

```
(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 10
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
```

Glu 1 Pro Leu Glu 5 Leu Glu Thr Ser Thr Arg 10